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 Applicant: Rothberg, et al.

USSN: 09/814,338

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number 09/814,338  
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 First Named Inventor Rothberg  
 Group Art Unit 1645  
 Examiner Name Not Yet Assigned  
 Attorney Docket Number 21465-501CIP2

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U.S. PATENT DOCUMENTS				Class	Sub Class	Filing Date If Appropriate
Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	Name of Patentee(s) or Applicant(s)		
	A1*	4,811,218	03/07/89	Hunkapiller et al.		
	A2*	4,863,849	09/05/89	Melamede		
	A3*	5,171,534	12/15/92	Smith et al.		
	A4*	5,602,509	04/12/94	Cheeseman		
	A5*	5,445,934	08/29/95	Fodor et al.		
	A6*	5,525,464	06/11/96	Dmanac and Crkvenjakov		
	A7*	5,604,097	02/18/97	Brenner		
	A8*	5,648,245	07/15/97	Fire and Xu		
	A9*	5,714,320	02/03/98	Kool		
	A10*	5,728,529	03/17/98	Metzker and Gibbs		
	A11*	5,800,992	09/01/98	Fodor et al.		
	A12*	5,821,058	10/13/98	Smith et al.		
	A13*	5,830,662	12/03/98	Soares and Efstratiadis		
	A14*	5,834,252	11/10/98	Stemmer and Lipshutz		
	A15*	5,846,721	12/08/98	Soares and Bonaldo		
	A16*	5,846,727	12/08/98	Soper et al.		
	A17*	5,854,033	12/29/98	Lizardi		
	A18*	5,851,772	12/22/98	Mirzabekov et al.		
	A19*	5,871,697	02/16/99	Rothberg et al.		
	A20*	5,882,874	03/16/99	Fisher		
	A21*	5,928,905	07/29/99	Stemmer and Lipshutz		
	A22*	4,971,903	11/20/90	Hyman		

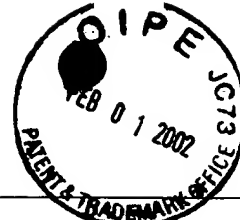
FOREIGN PATENT DOCUMENTS				Date of Publication	Translation Yes	Translation No
Exam Initials	Cite No.	Foreign Patent Document Office	Number	Name of Patentee(s) or Applicant(s)		
	B1*	WO	97/41260	Genescope		
	B2*	WO	98/08973	Cancer Research Campaign Tech. Ltd.		
	B3*	WO	98/13523	Pyrosequencing AB		
	B4*	WO	98/44151	Glaxo Group Ltd.		
	B5*	WO	98/44152	Glaxo Group Ltd.		
	B6*	WO	98/53300	Lynx Therapeutics		
	B7*	WO	99/07896	CuraGen Corporation		
	B8*	WO	99/15702	Life Technologies, Inc.		
	B9*	WO	99/28494	Packard BioScience Company		
	B10*	WO	99/30823	Packard BioScience B.V.		

## FOREIGN PATENT DOCUMENTS

Exam Initials	Cite No.	Foreign Patent Document Office Number	Name of Patentee(s) or Applicant(s)	Date of Publication	Translation Yes No
<input checked="" type="checkbox"/>	B11*	WO 99/36576	Packard BioScience Company	07/22/99	
<input checked="" type="checkbox"/>	B12*	WO 99/53102	Packard BioScience Company	10/21/99	
<input checked="" type="checkbox"/>	B13	WO 97/19193	Yale University	05/29/97	
<input checked="" type="checkbox"/>	B14	WO 97/27326	The Regents of the University of California	07/31/97	
<input checked="" type="checkbox"/>	B15	WO 98/50782	Trustees of Tufts College	11/12/98	
<input checked="" type="checkbox"/>	B16	WO 98/20019	Sequenom, Inc.	05/14/98	
<input checked="" type="checkbox"/>	B17	WO 98/35012	Eugene Y. Chan	08/13/98	

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
<input checked="" type="checkbox"/>	C1*	Baner et al. (1998). <i>Nucleic Acids Research</i> <u>26</u> (22): 5073-5078.
<input checked="" type="checkbox"/>	C2*	Barshop et al. (1991). <i>Analytical Biochemistry</i> <u>197</u> : 266-272.
<input checked="" type="checkbox"/>	C3*	Brandis et al. (1990). <i>Biochemistry</i> <u>55</u> : 2189-2200.
<input checked="" type="checkbox"/>	C4*	Bronk et al. (1996). <i>Anal. Chem.</i> <u>67</u> : 2750-2757.
<input checked="" type="checkbox"/>	C5*	Burns et al. (1998). <i>Science</i> <u>282</u> : 484-487.
<input checked="" type="checkbox"/>	C6*	Chan and Nie (1998). <i>Scient</i> <u>281</u> : 2016-2018.
<input checked="" type="checkbox"/>	C7*	Chee et al. <i>Science</i> <u>274</u> (5287).
<input checked="" type="checkbox"/>	C8*	Chiu and Christopoulos (1996). <i>Anal. Chem.</i> <u>68</u> : 2304-2308.
<input checked="" type="checkbox"/>	C9*	Daubendiek and Kool (1997). <i>Nature Biotechnology</i> <u>15</u> : 273-277.
<input checked="" type="checkbox"/>	C10*	Dickson et al. (1996). <i>Science</i> <u>274</u> (5289): 966.
<input checked="" type="checkbox"/>	C11*	Dickson et al. (1997). <i>Nature</i> <u>388</u> : 355-358.
<input checked="" type="checkbox"/>	C12*	Ferguson et al. (1996). <i>Nature Biotechnology</i> <u>14</u> : 1681-1684.
<input checked="" type="checkbox"/>	C13*	Fire and Xu (1995). <i>Proc. Natl. Acad. Sci.</i> <u>92</u> : 4641-4645.
<input checked="" type="checkbox"/>	C14*	Ha et al. (1996). <i>Proc. Natl. Acad.</i> <u>93</u> : 6264-6268.
<input checked="" type="checkbox"/>	C15*	Hacia (1999). <i>Nature Genetics Supplement</i> <u>21</u> : 42-47.
<input checked="" type="checkbox"/>	C16*	Hatch et al. (1999). <i>Genetic Analysis: Biomolecular Engineering</i> <u>15</u> : 35-40.
<input checked="" type="checkbox"/>	C17*	Healey and Walt (1997). <i>Anal. Chem.</i> <u>69</u> : 2213-2216.
<input checked="" type="checkbox"/>	C18*	Healey et al. (1995). <i>Science</i> <u>269</u> : 1078-1080.
<input checked="" type="checkbox"/>	C19*	Hengsakul and Cass (1996). <i>Bioconjugate Chem.</i> <u>7</u> : 249-254.
<input checked="" type="checkbox"/>	C20*	Hyman (1988). <i>Analytical Biochemistry</i> <u>174</u> : 423-436.
<input checked="" type="checkbox"/>	C21*	Ishijima et al. (1998). <i>Cell</i> <u>92</u> : 161-171.
<input checked="" type="checkbox"/>	C22*	Ito et al. (1994). <i>FEBS</i> <u>351</u> : 231-236.
<input checked="" type="checkbox"/>	C23*	Izawa et al. (1998). <i>The Journal of Biological Chemistry</i> <u>273</u> (23): 14242-14246.
<input checked="" type="checkbox"/>	C24*	Karamohamed et al. (1999). <i>Protein Expression and Purification</i> <u>15</u> : 381-388.
<input checked="" type="checkbox"/>	C25*	Karamohamed and Nyren (1999). <i>Analytical Biochemistry</i> <u>271</u> : 81-85.
<input checked="" type="checkbox"/>	C26*	Keller et al. (1996). <i>Applied Spectroscopy</i> <u>7</u> (50): 823-958.
<input checked="" type="checkbox"/>	C27*	Kievits et al. (1991). <i>Journal of Virological Methods</i> <u>35</u> : 273-286.
<input checked="" type="checkbox"/>	C28*	Kricka (1998). <i>Clinical Chemistry</i> <u>44</u> (9): 2008-2014.
<input checked="" type="checkbox"/>	C29*	Lander (1996). <i>Science</i> <u>274</u> : 536-539.
<input checked="" type="checkbox"/>	C30*	Lu et al. (1996). <i>J. Am. Chem. Soc.</i> <u>118</u> : 1587-1594.
<input checked="" type="checkbox"/>	C31*	Lizardi et al. (1998). <i>Nature Genetics</i> <u>19</u> : 225-232.
<input checked="" type="checkbox"/>	C32*	Metzker et al. (1998). <i>BioTechniques</i> <u>25</u> : 814-817.

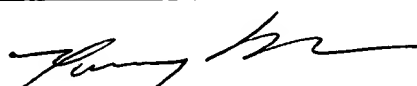


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## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
<input checked="" type="checkbox"/>	C33*	Metzker et al. (1998). <i>BioTechniques</i> 25: 446-462.
<input checked="" type="checkbox"/>	C34*	Munkholm and Walt (1986). <i>Anal. Chem.</i> 58: 1427-1430.
<input checked="" type="checkbox"/>	C35*	Mooney et al. (1996). <i>Proc. Natl. Acad. Sci.</i> 93: 12287-12291.
<input checked="" type="checkbox"/>	C36*	Narang et al. (1997). <i>Biosensors &amp; Bioelectronics</i> 12(9-10): 937-945.
<input checked="" type="checkbox"/>	C37*	Nie et al. (1994). <i>Science</i> 266: 1018-1021.
<input checked="" type="checkbox"/>	C38*	Nie and Zare (1997). <i>Annu. Rev. Biophys. Biomol. Struct.</i> 26: 567-596.
<input checked="" type="checkbox"/>	C39*	Nilsson et al. (1997). <i>Nature Genetics</i> 16: 252-255.
<input checked="" type="checkbox"/>	C40*	Nilsson et al. (1994). <i>Science</i> 265: 2085-2087.
<input checked="" type="checkbox"/>	C41*	Nyren, "Apyrase Immobilized on Paramagnetic Beads Used to Improve Detection Limits in Bioluminometric ATP Monitoring." <i>J. Biolumin. Chemilumin</i>
<input checked="" type="checkbox"/>	C42*	Nyren et al. (1997). <i>Analytical Biochemistry</i> 244: 367-373.
<input checked="" type="checkbox"/>	C43*	Nyren et al. (1993). <i>Analytical Biochemistry</i> 208: 171-175.
<input checked="" type="checkbox"/>	C44*	Oker-Blom et al. (1993). <i>BioTechniques</i> 14(5): 800-807.
<input checked="" type="checkbox"/>	C45*	Parthasarathy and Martin, (1994). <i>Nature</i> 369: 298-301.
<input checked="" type="checkbox"/>	C46*	Pierce et al. "Imaging individual green fluorescent proteins." <i>Scientific Correspondence</i> .
<input checked="" type="checkbox"/>	C47*	Pirrung and Huang (1996). <i>Bioconjugate Chem.</i> 7: 317-321.
<input checked="" type="checkbox"/>	C48*	Rawlinson et al. (1996). <i>Journal of Virology</i> : 8833-8849.
<input checked="" type="checkbox"/>	C49*	Ribeiro et al. (1998). <i>J. Biolumin Chemilumin</i> 13: 371-378.
<input checked="" type="checkbox"/>	C50*	Ronaghi et al. (1996). <i>Analytical Biochemistry</i> 242: 84-89.
<input checked="" type="checkbox"/>	C51*	Ronaghi et al. (1998). <i>Science</i> 281: 363-365.
<input checked="" type="checkbox"/>	C52*	Ronaghi et al. (1999). <i>Analytical Biochemistry</i> 267: 65-71.
<input checked="" type="checkbox"/>	C53*	Ronaghi, "Pyrosequencing: A Tool for Sequence-Based DNA Analysis." Royal Institute of Technology Department of Technology.
<input checked="" type="checkbox"/>	C54*	Service, "Microchip Arrays Put DNA on the Spot." <i>Science</i> 282(5388).
<input checked="" type="checkbox"/>	C55*	Venter et al. <i>Science</i> 280(5369): 1540.
<input checked="" type="checkbox"/>	C56*	Walker et al. (1992). <i>Nucleic Acids Research</i> 20(7): 1691-1696.
<input checked="" type="checkbox"/>	C57*	Walker et al. (1992). <i>Proc. Natl. Acad.</i> 89: 392-396.
<input checked="" type="checkbox"/>	C58*	Wang et al. (1997). <i>Analytical Biochemistry</i> 246: 133-139.
<input checked="" type="checkbox"/>	C59*	Wang et al. (1998). <i>Science</i> 280: 1077-1082.
<input checked="" type="checkbox"/>	C60*	Wang et al. (1998). <i>Science</i> 282: 902-907.
<input checked="" type="checkbox"/>	C61*	Weisiger, "Impact of Extracellular Diffusion on Hepatic Uptake Kinetics." ASTRAC: 1-26.
<input checked="" type="checkbox"/>	C62*	Wooster et al. (1994). <i>Science</i> 265: 277-285.
<input checked="" type="checkbox"/>	C63*	Xie and Lu (1999). <i>The Journal of Biological Chemistry</i> 274(23): 15967-15970.
<input checked="" type="checkbox"/>	C64*	Yin et al. "Transcription Against an Applied Force." <i>Science</i> 270: 1653-1657.
<input checked="" type="checkbox"/>	C65*	Nyren (1987). <i>Analytical Biochemistry</i> 167: 235-238.
<input checked="" type="checkbox"/>	C66	International Search Report for PCT/US00/25290. Mailed on 11/28/01.

\* a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. 09/398,833, filed September 16, 1999, now issued as Pat. No. 6274320 and relied upon for an earlier filing date under 35 U.S.C. §120 (continuation, continuation-in-part, and divisional applications).

Examiner Signature		Date Considered	11-14-02
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